





1,000

M 5.6, 43 km W of Methven, New Zealand Origin Time: 2023-09-19 21:14:49 UTC (Wed 09:14:49 local) Location: 43.7064° S 171.1180° E Depth: 11.7 km

1,000

Version 4

100,000

Created: 2 hours, 4 minutes after earthquake **Estimated Fatalities** Green alert for shaking-related fatalities Estimated Economic Losses and economic losses. There is a low likelihood of casualties and damage. 69% 10,000 100 10,000

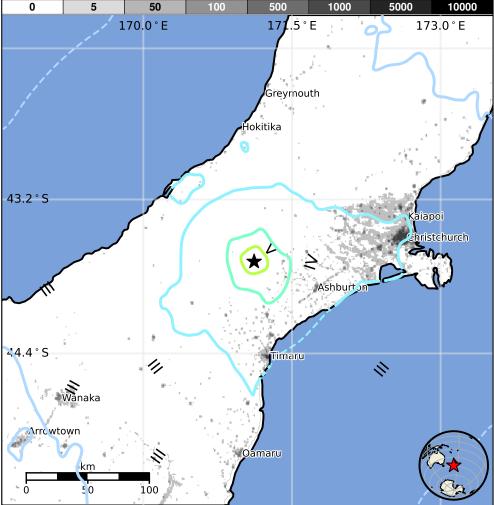
Estimated Population Exposed to Earthquake Shaking

| ESTIMATED POPULATION EXPOSURE (k=x1000) | | _* | 216k* | 478k | 3k | 0 | 0 | 0 | 0 | 0 |
|--|--------------------------|----------|--------|-------|----------|----------|-------------|------------|----------|----------|
| ESTIMATED MODIFIED MERCALLI INTENSITY | | I | 11-111 | IV | V | VI | VII | VIII | IX | X+ |
| PERCEIVED SHAKING | | Not felt | Weak | Light | Moderate | Strong | Very Strong | Severe | Violent | Extreme |
| POTENTIAL | Resistant Structures | None | None | None | V. Light | Light | Moderate | Mod./Heavy | Heavy | V. Heavy |
| DAMAGE | Vulnerable Structures | None | None | None | Light | Moderate | Mod./Heavy | Heavy | V. Heavy | V. Heavy |

^{*}Estimated exposure only includes population within the map area.

Population Exposure

population per 1 sq. km from Landscan 5000 10000



PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty. https://earthquake.usgs.gov/earthquakes/eventpage/us7000kwrq#pager

Structures

Overall, the population in this region resides in structures that are highly resistant to earthquake shaking, though some vulnerable structures exist. The predominant vulnerable building types are reinforced masonry and unreinforced brick with timber floor construction.

Historical Earthquakes

| Date (UTC) | Dist. (km) | Mag. | Max MMI(#) | Shaking Deaths |
|---------------|---------------|------|---------------|-------------------|
| 1974-09-21 | 243 | 5.8 | V(11k) | _ |
| 1993-08-10 | 366 | 6.9 | VII(2k) | _ |
| 1968-05-23 | 233 | 7.2 | IX(1k) | 3 |

Selected City Exposure

| | from GeoNames.org | | | | | | |
|---|-------------------|--------------------------|------------|--|--|--|--|
| _ | MMI | City | Population | | | | |
| - | IV | Methven | 1k | | | | |
| | | | IK | | | | |
| | IV | Pleasant Point | 1k | | | | |
| | IV | Tinwald | 3k | | | | |
| | IV | Ashburton | 30k | | | | |
| | IV | Timaru | 28k | | | | |
| | IV | Christchurch | 364k | | | | |
| | IV | Kaiapoi | 10k | | | | |
| | Ш | Oamaru, Waitaki District | 13k | | | | |
| | Ш | Greymouth | 9k | | | | |
| | Ш | Wanaka | 4k | | | | |
| | Ш | Queenstown | 10k | | | | |

bold cities appear on map.

(k = x1000)

Event ID: us7000kwrq